

Echinocereus, the validity of some of which has been questioned by cactus fanciers who usually allow quite narrow specific delimitations. Again, both *Opuntia ursina* and *O. erinacea* are given full specific value. (I'd do the same myself.) In other instances they have refrained from attempting to evaluate some of the more troublesome complexes in *Opuntia* and *Mamillaria*, frankly stating that several more years of critical study must be given these puzzling groups. In spite of what one's personal opinion may be concerning the treatment of the genera, the taxonomic treatment in this book is a practical one and doubtless will prove admirably "usable" to many westerners and travelers interested in the southwestern flora. The first hand information supplied by these men who have studied the cacti of Arizona at all seasons will be most valuable to botanists to whom opportunities for field work in the Southwest come infrequently.

The brief section dealing with the culture and care of cacti is sufficient for handling most of the native species. A. A. Nichol, who wrote this section of the book, refrained from giving detailed specifications, but included the necessary general hints covering the soil, water and light requirements of most of the Arizona cacti.

The book is well printed on glazed paper, with paper cover, and at the modest price of one dollar should find wide acceptance among botanists and cactus growers. The illustrations make it an excellent book for the non-professional who is interested in making a "speaking acquaintance" with the dwellers of the arid Southwest.—IRA L. WIGGINS, Dudley Herbarium, Stanford University.

Flora of Indiana. By CHARLES C. DEAM. Department of Conservation, Division of Forestry. Pp. 1-1236, maps 1-2243, 4 unnumbered maps and frontispiece. Indianapolis, Indiana. 1940. \$3.50. (Send order to State Forester, State Library, Indianapolis, Indiana.)

Dr. Deam has set a new high standard for regional floras. This volume will be a constant source of reference not only for students of the Indiana flora but for all those engaged in floristic studies. Every effort has been made to present a complete and accurate picture of the flora of Indiana. Dr. Deam has incorporated the results of field studies carried on through years of travel. Every species listed in the flora is based upon actual and accessible specimens and in many cases the identifications have been checked by specialists. Certain parts of the text have been contributed: the genera *Carex*, *Juncus* and *Luzula* by Frederick J. Hermann; Chenopodiaceae by Theodor Just; *Crataegus* by Ernest J. Palmer. Distribution maps are included for each species. These maps show not only the location but also the time of flowering and the herbaria in which the specimens are located.

The author has included a discussion of the floral areas of Indiana; a list of names of collecting places; a reference list of

Indiana collectors; and a bibliography of the Indiana flora. Ecological notes are given for many of the species and since these are based on the author's own observations they are of particular value.

The flora will undoubtedly be considered a model of excellence and thoroughness. Every student and writer of floras will do well to consult it not only as a model of form but because of the invaluable information which it contains. Such a volume should be a constant companion in the field; it is to be regretted that it was impossible to publish all this material in a form more suitable for field use.—MILDRED E. MATHIAS, Department of Botany, University of California, Berkeley, California.

NOTES AND NEWS

RIBES PETIOLARE DOUGL. IN CALIFORNIA. Occurring generally along streams and on moist sites from British Columbia south through the intermountain region to southern Oregon and Arizona, *Ribes petiolare* was first reported from California by George A. Root in 1937 (California Ranger 8⁹: 4, 1937). The species was found by Root and Hollis Day along Shovel Creek in Shasta National Forest, Siskiyou County, about nine miles south of the California-Oregon boundary line. In the same report Root mentions finding a few bushes of *R. petiolare* one and one-half miles north of the boundary line on Kelley Creek near Lakeview, Lake County, Oregon, at the northern end of the Warner Mountains; he did not see it farther south in Modoc National Forest, California. In reviewing Root's report, Clarence R. Quick (Madroño 4: 286–290. 1938) mentions observing *R. petiolare* in abundance on Crane Creek a few miles north of Kelley Creek in Oregon; he also was unsuccessful in finding the species south of the line in the Warner Mountains.

In July, 1939, the writer, while examining specimens in the herbarium of the United States Forest Service at Alturas, California, noted a collection of *Ribes petiolare* from "Lost Lake-Silver Creek" in the southern Warner Mountains, Modoc National Forest, made August 13, 1918, by Associate Forester L. S. Smith. It bore the numbers 1033 and 31510, the latter the accession number of the Herbarium of the United States Forest Service, Washington, D. C., to which Mr. Smith sent a portion of his collection. Dr. Frederick V. Coville verified the determination. The following herbaria have been consulted for records or specimens, but with negative results: University of California, Berkeley, California Academy of Sciences, Stanford University, United States Forest Service and Division of Plant Exploration and Introduction, Washington, D. C. Apparently Mr. Smith's collection constitutes the earliest known record of the species in California and establishes its occurrence approximately seventy miles south of the Oregon line.